



In a GMD engagement a ground-based interceptor, such as this one being test-launched from Kwajalein Atoll in the Pacific, is fired toward an incoming ICBM's predicted position. At a predetermined point a small "kill vehicle" detaches from the interceptor and collides with the ICBM, destroying it.





Space and Missile Defense Command

# Building Missile Defense in Alaska

Story by Steve Harding

FORT Greely is coming back to life — in a hurry. Dormant since being inactivated in 1995, the central Alaska installation owes its rebirth to intercontinental ballistic missiles, or, more accurately, to the threat such missiles pose to the United States.

Set amid thick woods and rolling hills some 100 miles southeast of Fairbanks, Fort Greely was long prized for its vast, unpopulated training areas. But in a 21st-century world in which ballistic missiles are increasingly common, the post has been tapped to play a key role in the nation's Ground-Based Midcourse Defense, or GMD, program.

## ICBMs and Kill Vehicles

Part of the multi-layered Ballistic Missile Defense System that has been under development for several years, GMD will use an array of radars and other sophisticated sensors to detect, track and intercept ballistic missiles launched against the United States and its allies, according to officials of the Missile Defense Agency.

► The GMD complex at Fort Greely, located northeast of Anchorage, near Fairbanks, will house six of the initial 10 interceptors.

In a GMD engagement a ground-based interceptor missile is fired toward the incoming ICBM's predicted location, and at a predetermined point releases a small "kill vehicle." Using information from both ground radars and its own sensors, the kill vehicle maneuvers toward a collision with the ICBM, destroying both itself and the incoming missile.

That, at least, is the theory. While successful test interceptions have been made by kill vehicles launched from the Ronald Reagan Ballistic Missile Defense Test Site on Kwajalein Atoll [see "*Kwajalein: More Than Rocket*

*Science*" in the July 2002 *Soldiers*], the GMD concept is still developmental, and has gone through a series of political ups and downs.

"President Bill Clinton was in office when this program began, and we were looking at a five-year ramp-up to deploy an operational missile-defense system by 2005," said MAJ Leonard Andrews, the missile defense plans officer for the Alaska Army National Guard in Anchorage. "But then President Clinton decided that the technology needed more development, so he ordered the creation of a robust testing program."





The picture changed again in December 2002, Andrews said, when President George W. Bush directed that an operational anti-missile system be deployed by 2004. The plan calls for fielding 10 interceptor missiles that year and 10 in 2005, while continuing to develop, test and improve GMD's capabilities.

Fort Greely will house six of the initial 10 interceptors — the other four will be installed at Vandenberg Air Force Base in California — and will most likely also be home to the 10 additional interceptors that are to be added in 2005, according to LTC Jay Smith, the Site Activation

Command's chief of staff for GMD in Alaska.

Construction of the 400-acre Fort Greely site began in June 2002, Smith said. The installation includes the six missile silos; a readiness-control building, which incorporates both the site's command-and-control center and the main facility for the site's security force; an entry-control point; missile storage and assembly buildings; electrical substations; and various communications facilities.

### Enter the Guard

Even as construction of the Fort Greely site continues, the Soldiers chosen to man and secure the finished site are already at work. And those Soldiers belong to the National Guard.

"Guard Soldiers are tasked to man the missile-defense system at all levels," Andrews said. "Colorado Guard members will man the brigade headquarters in Colorado Springs, and our Alaska Guard people will staff the

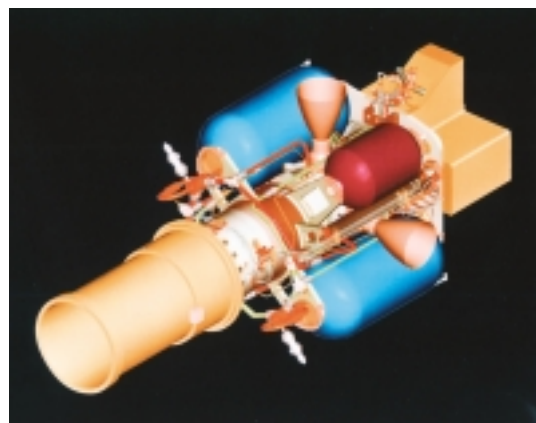
battalion-level systems at Fort Greely."

While designations for the brigade and battalion had not been officially announced by press time, Andrews said they will most likely be the 100th Missile Defense Brigade and 49th Missile Defense Battalion. The battalion will include both air-defense Soldiers and military police.

"The battalion's mission is twofold," said the unit's commander, MAJ Gregory S. Bowen. "We'll operate the fire-direction center at Fort Greely and secure the fenced facility it's located within. We expect the unit's overall manning to be about 75 percent MPs and headquarters staff, and about 25 percent system operators."

At press time three five-person crews of Alaska Guard missile operators were in Colorado Springs, training on the type of system they'll be responsible for in Alaska.

"They're training on the software and helping to develop the tactics, techniques and procedures the GMD system will use," Andrews said. "And at the beginning of the next fiscal year we plan to form two additional crews."



▲ The kill vehicle, seen above in an artist's rendering and at left as it actually appears, is intended to destroy its target by colliding with it.





▲ Workers prepare to lower the lining of a launching silo into position at Fort Greely. The metal liners were constructed elsewhere in Alaska and trucked overland to the GMD site.

While the missile operators are aiming for a 2004 operational debut, the MPs tasked with securing the Fort Greely GMD site have already been on duty for three months.

“Even though the site is still under construction, it has to be secure,” Andrews said. “And that task is probably a little more challenging now than it will be when the site is completely fenced in and the passive defensive systems and sensors are operational. What we have right now is three-quarters of the dual fence system in place, we have a lot of construction, and we have dozens of vehicles going in and out of multiple gates.”

The GMD site will be protected at “site security level alpha” — the same protective level as that applied to nuclear weapons storage facilities, Andrews said.

“Security for the completed GMD facility will consist of three layers,” he said. “The area inside the GMD’s perimeter fence will be the sole

responsibility of the security-force Soldiers. Security outside the facility’s fence and within Fort Greely will be up to the garrison and its Department of the Army civilian police, and security outside Fort Greely will be up to the civil authorities. In heightened-security situations we could even deploy the Army Guard’s Alaska Scouts, whose primary mission is critical-site security.”

To fulfill the “inside-the-wire” security mission, the security force is what Bowen called “robust.”

“Our Soldiers have everything from M9 pistols to squad automatic

weapons and Mk. 19 grenade launchers,” he said. And when the site is completed, the Soldiers will be authorized to use deadly force against intruders.

## Challenges and Responses

While securing the GMD site in the dead of winter — which at Fort Greely can bring wind-chill temperatures of 88 degrees below zero — will be daunting, those involved in bringing the facility online agree that the project’s most significant challenges are time and people.

“President Bush’s establishment of the 2004 start date for both the test bed and the operational capability caused significant changes in the mission and a dramatic compression of the preparation time,” Andrews said. “Both have caused some real headaches.”

The other main challenge, he said, has been to find the people needed to man and secure the

The MPs tasked with securing the Fort Greely GMD site have already been on duty for three months.







▲ Workers frame one of the tunnels that will protect important systems from the harsh Alaskan winters. Once complete, the tunnels will be buried under several feet of soil.





Steve Harding

▲ Those working to finish the Fort Greely site must contend with Alaska's quickly changing weather, and most outside work stops during the winter.

GMD facility, and to provide them with an acceptable quality of life.

"The Alaska Guard does not have the infrastructure, organization or required MOSs to fully man missile defense," Andrews said. "We've undertaken a nationwide campaign to attract personnel who are, or are willing to become, MPs or air defenders in Alaska. We went looking for people who would join the Active Guard and Reserve, or AGR, program and move themselves and their families to Fort Greely."

As a result, Bowen said, the majority of the people in the battalion have come from the lower 48 states. And those who have answered the call to serve in Alaska have given a variety of reasons for doing so.

"Some are really excited by the idea of being part of a strategic mission, because not many Guard members can say they're part of a one-of-a-kind mission like this one," Bowen said. "There are also those who see this as a great

Dealing with the various difficulties posed by building, manning and operating a high-tech missile-defense site in the remote interior of Alaska is all part of the mission.

opportunity to come to Alaska and experience its unique lifestyle."

Ensuring that Fort Greely will be able to provide the sort of on-post lifestyle Soldiers and their families are accustomed to is also proving to be challenging, Andrews said.

"There are no post services there to support families — no medical clinic, no schools, no post exchange, no child-development center. There's a small commissary that supports retirees living in the area, but that's about it," he said.

Until those sorts of family support and quality-of-life services can be reinstated at Fort Greely, Soldiers assigned to missile-defense duties at the post are living in Anchorage and being flown north to work week-long shifts. While at Fort Greely each Soldier has a room in a newly refurbished barracks.

"The Space and Missile Defense Command and the Installation Management Agency are working hard to upgrade the facilities at Fort Greely and improve the quality of life so we can take families back up there," Bowen said. "We hope to be able to

move the whole unit to Fort Greely permanently in the summer of 2004."

## A Vital Mission

Dealing with the various difficulties posed by building, manning and operating a high-tech missile-defense site in the remote interior of Alaska is all part of the mission, Smith said. And the importance of that mission is clearly understood by everyone involved.

"The thing we all keep in mind is that the United States is in a footrace in terms of missile defense," he said. "There are 25 to 30 nations in the world that are trying to develop ballistic-missile technologies and employ them in a weapons-of-mass-destruction type of role. We have to be able to defend the United States and its allies, and this is the initial step toward being able to do that."

And progress is being made despite the challenges, Smith said.

"We're on track for a Sept. 30, 2004, stand-up. We'll have the system installed and checked out, and ready to serve as both a test bed and an operational site. All of our facilities are slightly ahead of schedule at this point," he said.

From Andrews' point of view, ensuring that the facility becomes operational on schedule is a point of pride for all concerned.

"The Alaska Guard is very proud to be part of this vital mission," he said, "and we're very aware that no other state's National Guard has ever had the responsibility of defending the entire nation." 🇺🇸



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▲ A member of the guard force destined to secure the Fort Greely GMD site fires a Humvee-mounted machine gun during training at Anchorage's Fort Richardson.

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